

AMENDED CLAIMS

- by examiner's amendment*
1. (Currently Amended) A method to release viruses from animal cells containing said viruses, comprising
subjecting the cells to continuous centrifugation under conditions effective to concentrate the cells into a cell pellet, and
ejecting the pelleted cells from the centrifuge through one or more ejection outlets into a collection receptacle, under conditions effective to [promote lysis of said cells] lyse said cells solely by exertion of forces generated by said centrifugation and to release said viruses from said cells[,
wherein no additional step effective to achieve cell lysis is performed].
 - 2-3. (Cancelled)
 4. (Previously Amended) The method of claim 1, wherein greater than about 85% of the cells are lysed.
 5. (Original) The method of claim 1, wherein greater than 50% of the cells are lysed.
 6. (Original) The method of claim 1, wherein the cells are lysed as they are ejected.
 7. (Original) The method of claim 1, wherein the viruses are Adenoviruses.
 8. (Original) The method of claim 7, wherein the Adenoviruses are recombinant Adenoviruses suitable for gene therapy.
 9. (Original) The method of claim 7, wherein the yield/cell of Adenovirus particles or infectious Adenovirus is greater than that obtainable when cells containing said Adenovirus are lysed by a freeze-thaw procedure.

10. (Original) The method of claim 9, wherein the yield/cell of Adenovirus particles is about 1.2 to about 1.6 fold greater than that obtainable when cells containing said Adenovirus are lysed by a freeze-thaw procedure.

11. (Original) The method of claim 9, wherein the yield/cell of infectious Adenovirus is about 1.5 to about 1.9 fold greater than that obtainable when cells containing said Adenovirus are lysed by a freeze-thaw procedure.

12. (Original) The method of claim 1, wherein the cells are mammalian or insect cells.

13. (Original) The method of claim 1, wherein the cells being ejected are under a relative centrifugal force of 6500 to 7500 g.

14. (Original) The method of claim 13, wherein said centrifugal force is about 7000 g.

15. (Original) The method of claim 1, wherein the pelleted cells are ejected through one or more ejection outlets having a rectangular shape and a cross-sectional area of 50 to 500 mm².

16. (Original) The method of claim 13, further wherein the pelleted cells are ejected through one or more ejection outlets having a rectangular shape and a cross-sectional area of 50 to 500 mm².

17. (Original) The method of claim 1, wherein the cells are centrifuged in a Westfalia Centrifuge, Model CSA-1 or CSC-6.

18. (Previously Amended) The method of claim 1, wherein the forces exerted on the cells at the time of ejection are effective to lyse greater than about 85% of the cells.

19. (Currently Amended) In a method of releasing intracellular viruses from cells containing said viruses by continuous centrifugation, the improvement comprising harvesting viruses directly from [the ejected] a cell pellet [directly, without performing an additional

step effective to achieve cell lysis] formed by said centrifugation by ejecting said pelleted cells through one or more ejection outlets, under conditions effective to lyse said cells solely by exertion of forces generated by said centrifugation.

20. (Currently Amended) A method to prepare a cell lysate, consisting of
subjecting cells to continuous centrifugation to form a cell pellet, and
ejecting said pelleted cells through one or more ejection outlets into a collection
receptacle under conditions effective to [promote lysis of said cells and to form a cell lysate]
lyse said cells solely by exertion of forces generated by said centrifugation, and to form a
cell lysate.

21. (Currently Amended) A method to prepare a cell lysate, comprising
subjecting cells to continuous centrifugation under conditions effective to concentrate
the cells into a cell pellet, and
ejecting the pelleted cells from the centrifuge through one or more ejection outlets
into a collection receptacle under conditions effective to [promote lysis of said cells] lyse said
cells solely by exertion of forces generated by said centrifugation and to form a cell lysate[,
wherein no additional step effective to achieve cell lysis is performed].

22. (Withdrawn) Adenoviruses prepared by the method of claim 7.

23. (Withdrawn) Adenoviruses prepared by the method of claim 17.

24. (Currently Amended) A method to release viruses from animal cells
containing said viruses, comprising
subjecting the cells to continuous centrifugation under conditions effective to
concentrate the cells into a cell pellet, and
ejecting the pelleted cells from the centrifuge through one or more ejection outlets
into a collection receptacle, under conditions effective to [promote lysis of said cells] lyse
said cells solely by exertion of forces generated by said centrifugation and to release said
virus from said cells.

25. (Previously Amended) The method of claim 24, wherein greater than about
85% of the cells are lysed.

26. (Currently Amended) A method to release viruses from animal cells containing said viruses, consisting essentially of
subjecting the cells to continuous centrifugation under conditions effective to concentrate the cells into a cell pellet, and
ejecting the pelleted cells from the centrifuge through one or more ejection outlets into a collection receptacle, under conditions effective to lyse [said cells] said cells solely by exertion of forces generated by said centrifugation and release said viruses from said cells.

27. (Currently Amended) A method to [prepare] release an intracellular organism, or an intracellular organelle or biological molecule, from host cells containing said organism, organelle or biological molecule, comprising
subjecting the cells to continuous centrifugation under conditions effective to concentrate the cells into a cell pellet, and
ejecting the pelleted cells from the centrifuge through one or more ejection outlets into a collection receptacle, under conditions effective to [promote lysis of said cells] lyse said cells solely by exertion of forces generated by said centrifugation and to release said organism, intracellular organelle or biological molecule from said cells.
[wherein no additional step effective to achieve cell lysis is performed.]

28. (Original) The method of claim 1, further comprising subjecting the ejected cells to expanded bed chromatography.

29. (Original) The method of claim 1, wherein the forces exerted on the cells at the time of ejection are effective to lyse greater than about 50% of the cells.

30. (Original) The method of claim 24, wherein greater than about 50% of the cells are lysed.